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Notice of Allowability	Application No.	Applicant(s)	
	10/760,118	TICHENOR ET AL.	
	Examiner	Art Unit	
	Alessandro V. Amari	2872	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 1/18/2006.
2. ☒ The allowed claim(s) is/are 1-3,7-10,12-17,20-23,38 and 39.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>12/27/2005</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Charles Jew on 21 March 2006.

The application has been amended as follows:

In claim 1, line 2, after the word "image" insert the word --extreme ultra-violet--

In claim 23, line 1, replace "claim 19" with --claim 15--.

Drawings

2. The drawings filed on 16 January 2004 are accepted.

Allowable Subject Matter

3. Claims 1-3, 7-10, 12-17, 20-23, 38 and 39 are allowed.

4. The following is an examiner's statement of reasons for allowance:

Claims 1 and 15 are allowable over the prior art for at least the reason that the prior art fails to teach or reasonably suggest, "wherein the underlying reflective surface has a normal incidence reflectivity of at least about 30% of the EUV radiation and wherein the underlying reflective surface comprises a first multilayer film that is deposited on a surface of the substrate and wherein the sacrificial reflective surface is a second multilayer film that is deposited on a surface of the underlying reflective surface and wherein the presence of the upper sacrificial reflective surface does not enhance

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the reflectance of the at least one collection mirror” as set forth in the claimed combination. Claims 2, 3, 7-10, 12-14 and 38 are allowable based upon their dependence on claim 1 and claims 16, 17, 20-23 and 39 are allowable based upon their dependence on claim 15.

The prior art of record teaches a condenser system to collect and image extreme ultraviolet radiation (EUV) to a mask comprising a source of radiation that generates EUV radiation and at least one collector mirror facing the source of radiation wherein the collector mirror comprises a substrate and a underlying reflective surface. However, the prior art of record does not teach an upper sacrificial reflective surface, wherein the upper sacrificial reflective surface serves to prolong the useful life of the EUV collector mirror, and that the underlying reflective surface has a normal incidence reflectivity of at least about 30% of the EUV radiation and wherein the underlying reflective surface comprises a first multilayer film that is deposited on a surface of the substrate and wherein the sacrificial reflective surface is a second multilayer film that is deposited on a surface of the underlying reflective surface and wherein the presence of the upper sacrificial reflective surface does not enhance the reflectance of the at least one collection mirror and there is no motivation or teaching to modify this difference as derived.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

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5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alessandro V. Amari whose telephone number is (571) 272-2306. The examiner can normally be reached on Monday-Friday 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ava/aly
22 March 2006

Alessandro Amari
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Examiner AU2872